

# **New York State's Point Source Emissions Inventory Merging Criteria and Hazardous Air Pollutant Inventories**



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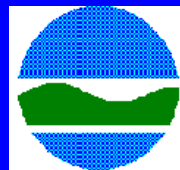


***International Emissions Inventory  
Conference***

***April 16, 2002***

# The Need to Develop an Emissions Inventory Program in New York State was Fueled by:

- Clean Air Act Amendments of 1990
  - Ozone non-attainment area requirements under section 182(a)(3)(B), “Emission Statements”
  - Title V permit fees under section 502(b)(3)(B)
  - Assessment of Atmospheric Deposition to the Great Lakes under section 112(m)



# **The Need to Develop an Emissions Inventory Program in New York State was Fueled by:**

- New York State Clean Air Compliance Act
- Revisions to New York State Environmental Conservation Law requiring actual emissions information to be used to calculate operating permit program fees



# Source Management System

- Permit management system prior to 1995
- Emission points (which were the equivalent to a stack) and all associated processes were permitted with a contaminant specific emissions requirement



# Air Facility System

- First phase (emissions module) put into production in 1995
- Sybase chosen for database
- Powerbuilder chosen for front end application



## 6 NYCRR Part 202-2

### “Emission Statements”

- Promulgated in 1994 (emissions inventory began in 1993 with 1992 emissions)
- Requires the gathering of contaminant specific emissions of all criteria and hazardous air pollutants for all permitted emission points at the process level



# 6 NYCRR Part 202-2

## “Emission Statements”

- Contested by Eastman Kodak Company
- Result: Emission statement would not require facilities to report emissions in more detail than what was included in permit



# 6 NYCRR Part 202-2

## “Emission Statements”

- The following are subject to the reporting requirements of 6 NYCRR 202-2:
  - Volatile Organic Compounds
  - Oxides of Nitrogen
  - Carbon Monoxide
  - Sulfur Dioxide
  - Particulate Matter
  - Lead

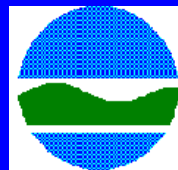




# 6 NYCRR Part 202-2

## “Emission Statements”

- The following are subject to the reporting requirements of 6 NYCRR 202-2:
  - Approx. 500 HAP's by CAS code
  - 20 Class I and 33 Class II compounds considered to be stratospheric ozone depleting substances



# Re-assessment of Computer Development Priorities

- System now needed to support the following functions in addition to emissions:
  - Issuance of Title V permits
  - Compliance
  - Fee billing
  - Tracking



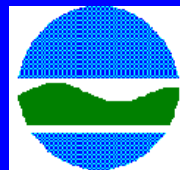
# A New Direction

- 1995 - EPA White Paper
- 1996 – Promulgation of 6 NYCRR Part 201, “Permits and Certificates”
- The above changed the Department’s emission point/process level permitting system to an emission unit/process level permitting



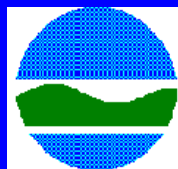
# Consequences

- Loss of relationship between process data, including emissions, and stacks
- Loss of non-hazardous CAS specific contaminants to VOC and PM
- Loss of the ability to related historical emissions data from points to units



# Emission Statement Transition

- Initially, all emission points became emission units
- When building an emission statement from a final Title V permit, staff is required to map the newly created unit identification back to the initial process
- Approx. 75% of emission statements have been converted to a Title V unit basis



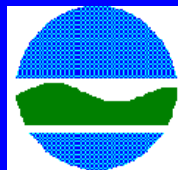
# AFS Refinement

- Ability to calculate criteria emissions with the push of a button
- Utilizing emission factors and a facility-provided throughput at the process level
- Canned reports
- Quality Assurance and Control programs
- Built-in error messaging



# Current AFS System Limitations

- Stationary source emissions data can not be directly exported to RAPIDS or the NEI.



# Needed Improvements and Upgrades to AFS

- A HAP calculator button/window would allow performing this function in AFS using emission factors.
- Speciating in AFS would allow for direct export to the Great Lakes Commission and harmonize the two systems





# Conclusion

- The Department has been successful in achieving a criteria pollutant and hazardous air pollutant emissions inventory that satisfies the needs of the Department.
- Difficulties remain in system maintenance because of the dynamic nature of AFS, RAPIDS and the NEI.
- The Department has collected all the data needed to maintain complete inventories, but strives to to achieve a workable connection with external inventory databases.

